



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

XXXIII. Observations of the Summer Solstice, 1813, with the Mural Circle, at the Royal Observatory.

By John Pond, Esq. Astronomer Royal, F. R. S.

Read July 8, 1813.

1813.	Barometer.	Therm.		Refraction.	Observations as given by the Instrument.	Equations for N. P. D.		Equations for Zenith Distance.		Semi-diameter of the ☉ by Nautical Almanack.	Reduction to the Solstice.	Solstitial Zenith Distance with Parallax.		Correction for ☉'s Lat.	Solstitial Zenith Distance corrected for ☉'s Lat.		Solstitial N. P. D. corrected for ☉'s Lat.	
		In.	Out.			☉	'	☉	'			☉	'		☉	'		
June 10	29,57	62	69	0 30,3	☉ LL 67 14 21,9	— 0,6	— 38 31 22,1	15 46,5	— 26 44,7	28 0 58,9	66 32 20,4	1,0	28 0 59,9	66 32 21,4	1,0	28 0 59,9	66 32 21,4	
11	29,81	64	71	29,6	☉ UL 66 38 18,9	— 0,6	22,1	15 46,5	22 16,2	50,7	18,2	1,0	0 57,7	19,2	1,0	0 57,7	19,2	
12	29,70	64	74	30,1	☉ LL 67 5 48,1	— 0,6	22,1	15 46,4	18 12,1	57,6	19,1	1,0	0 58,6	20,1	1,0	0 58,6	20,1	
13	30,02	61	66	30,9	☉ UL 66 30 36,9	— 0,6	22,1	15 46,3	14 32,4	59,6	21,1	0,9	1 0,5	22,0	0,9	1 0,5	22,0	
15	29,62	60	66	30,1	☉ LL 66 56 2,3	— 0,6	22,1	15 46,1	8 26,7	57,5	19,0	0,7	0 58,2	19,7	0,7	0 58,2	19,7	
21	30,15	57	60	30,0	☉ UL 66 16 9,3	— 0,6	22,1	15 45,8	0 1,9	1 1,1	22,6	— 0,1	1 1,0	22,5	— 0,1	1 1,0	22,5	
23	30,17	56	59	30,8	☉ LL 66 48 7,4	— 0,6	22,1	15 45,6	0 32,0	0 58,5	20,0	— 0,3	0 58,2	19,7	— 0,3	0 58,2	19,7	
25	30,18	59	64	29,9	☉ UL 66 18 47,8	— 0,6	22,1	15 45,6	2 41,1	1 0,1	21,6	— 0,3	0 59,8	21,3	— 0,3	0 59,8	21,3	
27	30,07	64	70	30,2	☉ LL 66 54 6,5	— 0,6	22,1	15 45,6	6 29,3	0 59,7	21,2	— 0,2	0 59,5	21,0	— 0,2	0 59,5	21,0	
28	29,94	61	67	29,7	☉ UL 66 25 9,0	— 0,6	22,1	15 45,6	9 0,4	1 1,8	23,3	— 0,1	1 1,7	23,2	— 0,1	1 1,7	23,2	
29	29,75	64	74	30,0	☉ LL 66 59 32,2	— 0,6	22,1	15 45,5	11 56,1	0 58,5	20,0	0,0	0 58,5	20,0	0,0	0 58,5	20,0	
July 1	29,67	62	65	29,6	☉ UL 66 35 7,1	— 0,6	22,1	15 45,5	19 0,7	0 59,4	20,9	0,3	0 59,7	21,2	0,3	0 59,7	21,2	
2	29,75	60	62	31,8	☉ LL 67 10 44,8	— 0,6	22,1	15 45,5	23 9,5	59,5	21,0	0,4	0 59,9	21,5	0,4	0 59,9	21,5	
Mean of 13 Observations					28 0 59,1		66 32 20,6		28 0 59,1		66 32 20,6		28 0 59,5		66 32 21,0		28 0 59,5	
Parallax — 4",0 Nutation — 6',5 =					— 10,5		— 10,5		— 10,5		— 10,5		— 10,5		— 10,5		— 10,5	
					28 0 48,6		66 32 10,1		28 0 48,6		66 32 10,1		28 0 49,0		66 32 10,5		28 0 49,0	
					Mean Obliquity		—		Mean Obliquity		—		Mean Obliquity at Summer Solstice, 1812		23 27 49,5		23 27 49,5	
					* Mean Obliquity at Summer Solstice, 1812		—		Mean Obliquity at Summer Solstice, 1812		—		23 27 50,5		23 27 50,5		23 27 50,5	
					Mean of Two Observations or Mean Obliquity, Jan. 1, 1813		—		Mean of Two Observations or Mean Obliquity, Jan. 1, 1813		—		23 27 50,0		23 27 50,0		23 27 50,0	

* I avail myself of this opportunity of correcting a very small error that was made in computing the summer solstice of 1812. The correction for the sun's latitude should have been 0",6 instead of 0",9, and should have been applied with the contrary sign. The obliquity thus corrected will be 23° 27' 50",5.